

Remarks/Arguments

The rejection of claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Krasner in view of Krinski et al. is respectfully traversed.

As an initial matter, respectfully, it is believed that the Examiner does not understand the fundamental difference between a friction increasing and a velocity increasing additive. Friction and viscosity are different physical phenomena. Sand in an adhesive causes friction between adjacent layers. A viscosity increasing additive, such as the soy polysaccharide taught by Krinski et al., lowers the flowability of the adhesive. However, when in the lamination process the temperature is increased, a high viscosity will not help because viscosity lowers (flowability increases) with rising temperature. On the other hand, friction caused by sand is not influenced by temperature. It is just as in an engine: sand in the oil will cause friction and may destroy the engine whereas a viscosity increasing additive in the oil improves the lubricating effect at higher temperatures. The key function of the friction increasing additive Z according to the present invention is to avoid the shifting of the adhesive coating relative to the printed layer sandwiched therebetween, see section [0011] of the published application. Such shift or drift causes the text to become blurred and to lose its contours. In order to avoid this effect, the adhesive layer contains a solid, friction causing material, one of the materials mentioned in the specification being sand, see section [0014], last sentence.

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Referring to the prior art, the layered plates in Krasner do not contain a printed layer. The light sensitive films within the plates do not have the problem that they suffer from a shift of adjacent adhesive layers. Krasner deals with entirely different problems, and the skilled person has no motivation to look at Krasner for a solution of his shift problem. Name plates and credit cards have little in common.

Krinski et al. provides a new adhesive for the paper industry. The teaching of Krinski et al. has no relation to the present invention and is also not applicable on the manufacturing of identity cards. In particular, Krinski et al. teaches a specific adhesive composition for the paper industry which comprises an aqueous solution of an alkaline metal silicate as an adhesive component. It cannot be emphasized too strongly that such silicate solutions do not cause friction. According to Krinski et al. these metal silicate solutions are doped with the soy polysaccharide material in an amount effective to thicken the silicate solution. This means that the silicate solution itself has an insufficient viscosity and needs the polysaccharide material as a thickener to increase the viscosity. Neither Krinski et al. alone, nor in combination with Krasner therefore teach the use of a (solid) additive Z in order to increase the friction between card layers.

The rejection of claims 8 and 9 under 35 U.S.C. § 103(a) as being unpatentable over Krasner in view of Takeuchi et al. is respectfully traversed. The patent to Takeuchi et al. relates to holograms having a layered structure. Such holograms may be used in connection with, e.g. credit cards. The layered structure of the hologram does not correspond to the layered structure of a card.

According to one embodiment such holograms may have a fragile layer with adhesive properties suited to connect adjacent upper and lower layers. The fragile layer is made from a plastic and may contain filler materials 'such as talc. The filler in the form of a fine powder is added in order to increase the fragility of the layer to make the credit cards tamper proof. In this connection, please refer to col. 13, line 46 to 68.

The increase of fragility of the fragile layer is a safety means, which at the same time lowers the adhesive strengths. The shifting problem underlying the present invention is no issue with Takeuchi et al., and there is no indication that a shift of the fragile layer relative to the adjacent layer could cause problems like a blurred print. As the patent to Takeuchi et al. only relates to the manufacture of holograms to be included into cards as the safety means, this reference does not add anything to the existing problem of the present invention, namely to avoid a relative shift of layers during lamination.

Respectfully, it is clear that Krasner, Krinski et al. and Takeuchi et al. all have at most marginal relation to the present problem and invention. Insofar, the skilled one has little motivation to relate the individual prior art teachings to the present problem and invention, or even to combine the prior art teachings. The inclusion of friction increasing additives into the adhesive layers of the present cards is neither mentioned nor suggested in any of the prior art references.

Applicants believe that the application is in condition for allowance and respectfully solicit a Notice of Allowance.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-3881, under Order No. 7004-102N1. If an extension of time is required please consider this a petition and charge any additional fees which may be required to deposit account No. 50-3881. A duplicate copy of this paper is enclosed.

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Respectfully submitted,

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